

WEST☐ Generate Collection

L1: Entry 35 of 36

File: DWPI

Mar 16, 1989

DERWENT-ACC-NO: 1989-086729

DERWENT-WEEK: 199729

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TITLE: Selective non-catalytic redn. of nitric oxide with amino gp. source - esp.
ammonia in presence of additive, pref. carbon mon:oxide or sulphur oxide

PATENT-ASSIGNEE: WOLFRUM J (WOLFI)

PRIORITY-DATA: 1987DE-3730141 (September 7, 1987)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
DE 3730141 A	March 16, 1989		004	

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
DE 3730141A	September 7, 1987	1987DE-3730141	

INT-CL (IPC): A62D 3/00; B01D 53/34

ABSTRACTED-PUB-NO: DE 3730141A

BASIC-ABSTRACT:

Selective, non-catalytic redn. of NO is carried out with substances forming NH₂, e.g. NH₃, urea, amines etc., with special regard to the effect of CO, SO and SO₃. The novelty is that the hot combustion gas at 650-1500 deg. C is contacted with the reducing agent and the additive, which can also be obtd. by combustion in the flue gas, using in an amt. of 0.5-5 mole/mole NO.

USE/ADVANTAGE - NO can be removed by homogeneous selective redn., avoiding the high cost of the catalyst, the risk of poisoning and deactivation and the need for maintaining a narrow temp. range.

ABSTRACTED-PUB-NO: DE 3730141A

EQUIVALENT-ABSTRACTS:

CHOSEN-DRAWING: Dwg.0/0

DERWENT-CLASS: E36 J01 P35

CPI-CODES: E11-Q02; E31-F01A; E31-H02; E32-A02; J01-E02;

WEST[Help](#)[Logout](#)[Interrupt](#)[Main Menu](#)[Search Form](#)[Posting Counts](#)[Show S Numbers](#)[Edit S Numbers](#)[Preferences](#)**Search Results -**

Terms	Documents
selective same non-catalytic same reduction	36

Database:

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US Pre-Grant Publication Full-Text Database	
JPO Abstracts Database	
EPO Abstracts Database	
Derwent World Patents Index	
IBM Technical Disclosure Bulletins	▼

Refine Search:selective same non-catalytic same
reduction[Clear](#)**Search History****Today's Date: 12/11/2001**

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DWPI	selective same non-catalytic same reduction	36	<u>L1</u>

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L1: Entry 6 of 36

File: DWPI

Dec 29, 1998

DERWENT-ACC-NO: 1999-094801
DERWENT-WEEK: 199908
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TITLE: Nitrogen oxide reduction in flue gas of fossil fuel fired boiler - involves adding nitrogenous treatment agent into flue gas during selective non-catalytic reduction stage

INVENTOR: GIBBONS, F X; HUHMANN, A L ; WALLACE, A J

PATENT-ASSIGNEE: PUBLIC SERVICES ELECTRIC & GAS CORP (PUBLN)

PRIORITY-DATA: 1997US-0840841 (April 17, 1997), 1995US-0492140 (June 19, 1995)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 5853683 A	December 29, 1998		009	B01J008/00

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
US 5853683A	June 19, 1995	1995US-0492140	CIP of
US 5853683A	April 17, 1997	1997US-0840841	

INT-CL (IPC): B01J 8/00

ABSTRACTED-PUB-NO: US 5853683A
BASIC-ABSTRACT:

The method involves introducing a nitrogenous treatment agent (16) that is effective in selective non-catalytic reduction 'SNCR' of nitrogen oxides into a furnace (20) containing flue gas stream. Another nitrogenous treatment agent that is effective in selective catalytic reduction 'SCR' of nitrogen oxides is mixed with the SNCR treated flue gas. The SNCR treated flue gas mixed with the SCR nitrogenous treatment is guided by guide vanes (38) to an expander (40) through SCR catalyst banks (42,44).

The nitrogenous treatment agents are selected from the group consisting of ammonia and urea. During the SNCR stage, a baseline amount of nitrogenous treatment agent is continuously added to the flue gas. A NOx level determining device (15) connected to a microprocessor (25) determines the NOx level in the flue gas before and after combustion. The SNCR treatment agent valve (13) and the SCR treatment agent valve (33) are opened at appropriate timing depending on the determined NOx level.

USE - For coal fired power plant.

ADVANTAGE - The reagent injection rate is carefully controlled to leave virtually on excess ammonia and to maximize reagent utilization by producing products of elemental nitrogen by treatment with NOx.

ABSTRACTED-PUB-NO: US 5853683A
EQUIVALENT-ABSTRACTS:

CHOSEN-DRAWING: Dwg.1/1

DERWENT-CLASS: E36 J04

CPI-CODES: E10-A13B2; E11-Q02; E31-H01; E31-H02; E32-A02; J04-E01;

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L1: Entry 15 of 36

File: DWPI

Dec 26, 1995

DERWENT-ACC-NO: 1996-057701

DERWENT-WEEK: 199606

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TITLE: Nitrogen oxide-reducing process for carbonaceous fuel combustion effluents - comprising injection of droplets of two-phase reducing mixture at selective non-catalytic chemical reduction-effective temps.

INVENTOR: CHAWLA, J M; PACHALY, R ; VON BERGMAN, J

PATENT-ASSIGNEE: NALCO FUEL TECH (NALC)

PRIORITY-DATA: 1992US-0952621 (November 23, 1992), 1994US-0294609 (August 23, 1994)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 5478542 A	December 26, 1995		011	B01D053/34

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
US 5478542A	November 23, 1992	1992US-0952621	Cont of
US 5478542A	August 23, 1994	1994US-0294609	

INT-CL (IPC): B01D 53/34

ABSTRACTED-PUB-NO: US 5478542A

BASIC-ABSTRACT:

A process for reducing NOx concentration in a combustion effluent, comprises: (a) preparing a two-phase (liquid and gas) NOx-reducing mixture, where the liquid phase comprises a solution of urea; and (b) injecting the mixture at its characteristic sonic velocity (at liq. droplet sizes effective to enable evaporation prior to impingement on a surface within or defining the passage) into a passage containing a combustion effluent at a temp. effective for reduction of NOx by selective gas-phase reaction.

Also claimed is the above process where the liq. phase of the mixt. is defined as comprising a soln. of one or more of ammonia, urea, ammonium citrate, ammonium formate, ammonium carbonate, ammonium hydroxide and ammonium acetate; and the gaseous phase comprises air and/or steam.

The mixt. is pref. injected at pressure 1.6-50 bar. The gaseous and liq. components are pref. mixed to provide 30-80 vol.% of the gaseous component. The median size of the liq. droplet is pref. 5-100 mum and the effective max. size is no greater than four times that of the median. The liq. phase is pref. an aq. soln. of 10-80 wt.% of a NOx reducing agent, and the mixt. is injected at temp. effective for the selective non-catalytic reduction of NOx. Pref. different mixts. of chemicals are injected at each of a plurality of temp. zones, with an enhancer comprising an oxygenated hydrocarbon being injected into at least one zone. The oxygenated hydrocarbon is pref. selected from: alcohols, ketones and/or sugars.

USE - NOx reduction of a combustion effluent (esp. gas from carbonaceous fuels).

ADVANTAGE - The process enables even distribution of reducing agents within the effluent (over a cross section where the effective temp. window for the reduction of NOx exists).

ABSTRACTED-PUB-NO: US 5478542A
EQUIVALENT-ABSTRACTS:

CHOSEN-DRAWING: Dwg.1/6

DERWENT-CLASS: E36 J01
CPI-CODES: E10-A13B2; E10-C02A; E10-C04J1; E10-C04J2; E11-Q02; E31-H02; E32-A02;
E32-A04; J01-E02;

WEST☐ Generate Collection

L5: Entry 7 of 8

File: DWPI

Oct 31, 2000

DERWENT-ACC-NO: 1998-159439

DERWENT-WEEK: 200059

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TITLE: Non:azide gas generator in vehicle inflatable air bag is mixed with - selective non-catalytic reducing agent comprising ammonium salt, amide compound or imide compound to reduce toxicity of effluent gases

INVENTOR: BURNS, S P; KHANDHADIA, P S ; MOQUIN, L A

PATENT-ASSIGNEE:

ASSIGNEE

CODE

AUTOMOTIVE SYSTEMS LAB INC

AUTON

PRIORITY-DATA: 1996US-0695954 (August 12, 1996)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 2000514395 W	October 31, 2000		021	C06D005/00
WO 9806682 A2	February 19, 1998	E	013	C06B000/00
AU 9739679 A	March 6, 1998		000	C06B031/00
EP 950040 A2	October 20, 1999	E	000	C06D005/00
KR 99037956 A	May 25, 1999		000	C06D005/00

DESIGNATED-STATES: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ
DE DK EE ES FI GB GE HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU
LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT
UA UG UZ VN AT BE CH DE DK EA ES FI FR GB GH GR IE IT KE LS LU MC
MW NL OA PT SD SE SZ UG ZW DE FR GB

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
JP2000514395W	July 31, 1997	1997WO-US13501	
JP2000514395W	July 31, 1997	1998JP-0509789	
JP2000514395W		WO 9806682	Based on
WO 9806682A2	July 31, 1997	1997WO-US13501	
AU 9739679A	July 31, 1997	1997AU-0039679	
AU 9739679A		WO 9806682	Based on
EP 950040A2	July 31, 1997	1997EP-0937077	
EP 950040A2	July 31, 1997	1997WO-US13501	
EP 950040A2		WO 9806682	Based on
KR 99037956A	February 12, 1999	1999KR-0701228	

INT-CL (IPC): B60R 21/00; B60R 21/26; C06B 0/00; C06B 23/02; C06B 31/00; C06D 5/00

ABSTRACTED-PUB-NO: WO 9806682A
BASIC-ABSTRACT:

A vehicle passenger restraint system comprises: (i) an inflatable air bag, (ii) a gas generator containing a gas generant compound, and (iii) a selective non-catalytic reducing compound comprising an ammonium salt, ammonium hydroxide, an amine compound, an amide compound or an imide compound.

Also claimed is a method of reducing the toxicity of effluent gases of a gas generator in a vehicle air bag by mixing a selective non-catalytic reducing compound with the gas generator and reacting the vapours from the reducing compound with those of the generator.

ADVANTAGE - The reducing compound produces NH₂ radicals which react with NO_x compounds produced by nonazide gas generator compounds to reduce the toxicity thereof without compromising the gas generant properties.

CHOSEN-DRAWING: Dwg.0/0

TITLE-TERMS: NON AZIDE GAS GENERATOR VEHICLE INFLATE AIR BAG MIX
SELECT NON CATALYST REDUCE AGENT COMPRISE AMMONIUM SALT AMIDE
COMPOUND IMIDE COMPOUND REDUCE TOXIC EFFLUENT GAS

DERWENT-CLASS: E13 E16 E35 K04 Q17

CPI-CODES: E05-S; E07-D13B; E10-A12C2; E10-A13B2; E32-A04; K04-C;

CHEMICAL-CODES:

Chemical Indexing M3 *01*

Fragmentation Code

F012 F014 F016 F580 J5 J523 L9 L910 L999 M280

M320 M413 M510 M521 M530 M540 M782 M903 M904 M910

Q443

Ring Index

00212
Specfic Compounds
00860M
Registry Numbers
0860U

Chemical Indexing M3 *02*
Fragmentation Code
K0 L4 L432 M280 M320 M416 M620 M782 M903 M904
M910 Q443
Specfic Compounds
00123M
Registry Numbers
0123U

Chemical Indexing M3 *03*
Fragmentation Code
C101 C106 C107 C108 C500 C520 C730 C801 C802 C807
M411 M782 M903 M904 M910 Q443
Specfic Compounds
01485M
Registry Numbers
1485U

Chemical Indexing M3 *04*
Fragmentation Code
C106 C108 C500 C530 C730 C801 C802 C807 M411 M782
M903 M904 M910 Q443
Specfic Compounds
01304M
Registry Numbers
1304U

Chemical Indexing M3 *05*
Fragmentation Code
C017 C100 C500 C730 C801 C804 C806 C807 M411 M782
M903 M904 M910 Q443
Specfic Compounds
01947M
Registry Numbers
1947U

Chemical Indexing M3 *06*
Fragmentation Code
C009 C100 C500 C730 C801 C804 C806 C807 M411 M782
M903 M904 M910 Q443
Specfic Compounds
01946M
Registry Numbers
1946U

Chemical Indexing M3 *07*
Fragmentation Code
C101 C108 C500 C550 C730 C801 C802 C804 C807 M411
M782 M903 M904 M910 Q443
Specfic Compounds
01534M
Registry Numbers
1534U

Chemical Indexing M3 *08*

Fragmentation Code

C108 C316 C500 C540 C730 C801 C802 C804 M411 M782

M903 M904 M910 Q443

Specific Compounds

01786M

Registry Numbers

1786U

UNLINKED-DERWENT-REGISTRY-NUMBERS: 0123U; 0860U; 1304U; 1485U; 1534U; 1786U;
1946U; 1947U

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: C1998-051460

WEST[Generate Collection](#)**Search Results - Record(s) 1 through 8 of 8 returned.**☐ 1. Document ID: WO 200102319 A1

L5: Entry 1 of 8

File: DWPI

Jan 11, 2001

DERWENT-ACC-NO: 2001-159242

DERWENT-WEEK: 200116

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TITLE: Non-azide gas generating composition useful in actuating vehicle occupant restraint systems, e.g. an airbag inflator, has a silicone coating

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image
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☐ 2. Document ID: WO 200060154 A1

L5: Entry 2 of 8

File: DWPI

Oct 12, 2000

DERWENT-ACC-NO: 2001-015658

DERWENT-WEEK: 200102

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TITLE: Formulation of gas generant composition for use in inflating air bags and actuating seat belt pretensioners in passenger-restraint devices involves nitration of nitratable base fuel using excess nitric acid

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image
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☐ 3. Document ID: US 6287400 B1, WO 200055106 A1

L5: Entry 3 of 8

File: DWPI

Sep 11, 2001

DERWENT-ACC-NO: 2000-638172

DERWENT-WEEK: 200154

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TITLE: Gas generating composition, useful for inflating air bags and actuating seat belt pretensioners in passenger-restraint devices, comprises 5-aminotetrazole nitrate as fuel, and oxidizer

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image
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- ☐ 4. Document ID: US 6210505 B1, WO 9946222 A2, EP 1062189 A2

L5: Entry 4 of 8

File: DWPI

Apr 3, 2001

DERWENT-ACC-NO: 1999-551336

DERWENT-WEEK: 200120

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TITLE: Gas generant composition useful for inflating
automotive air bag passive restraint systems

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image
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- ☐ 5. Document ID: KR 2001041768 A, WO 9946009 A2, US 6074502 A

L5: Entry 5 of 8

File: DWPI

May 25, 2001

DERWENT-ACC-NO: 1999-551239

DERWENT-WEEK: 200168

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TITLE: Gas generant composition, useful for inflating
automotive air bag passive restraint systems

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Clip Img	Image
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- ☐ 6. Document ID: JP 2001504432 W, WO 9822208 A2, AU 9851702 A, US 5872329 A, EP 948734 A2, CN 1244916 A, KR 2000052990 A

L5: Entry 6 of 8

File: DWPI

Apr 3, 2001

DERWENT-ACC-NO: 1998-312223

DERWENT-WEEK: 200126

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TITLE: Non-azide, vehicle airbag gas generating composition -
comprises mixture of a substituted amine salt of triazole or a
tetrazole fuel and phase-stabilised ammonium nitrate oxidiser

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image
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- ☐ 7. Document ID: JP 2000514395 W, WO 9806682 A2, AU 9739679 A, EP 950040 A2, KR 99037956 A

L5: Entry 7 of 8

File: DWPI

Oct 31, 2000

DERWENT-ACC-NO: 1998-159439
DERWENT-WEEK: 200059
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TITLE: Non:azide gas generator in vehicle inflatable air bag
is mixed with - selective non-catalytic reducing agent
comprising ammonium salt, amide compound or imide compound to
reduce toxicity of effluent gases

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KVMC	Draw Desc	Image
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☐ 8. Document ID: US 6306232 B1, WO 9804507 A1, AU 9738038 A, EP 915813 A1, CN 1228752 A, KR 99037948 A

L5: Entry 8 of 8

File: DWPI

Oct 23, 2001

DERWENT-ACC-NO: 1998-130585
DERWENT-WEEK: 200165
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TITLE: Thermally stable, non-azide vehicle airbag propellant -
comprising nitro-guanidine, phase-stabilised ammonium nitrate
and guanidine, tetrazole or triazole high nitrogen fuel

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KVMC	Draw Desc	Image
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Terms	Documents
11 and 14	8

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Documents, starting with Document:

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